REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

The amendments to the Specification serve to correct inadvertent and unintentional errors, specifically the use of the label "SEQ ID NO:2" to refer to the polynucleotide sequence of SEQ ID NO:3. No new matter has been added by the amendments to the Claims. Therefore, Applicants respectfully request entry of the present amendments.

If the Examiner contemplates other action, or if a telephone conference would expedite allowance of the claims, Applicants invite the Examiner to contact the undersigned at (650) 843-7352 or (650) 621-8581.

Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. **09-0108.**

Respectfully submitted,

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Date: Feb. 6, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning at line 1 of page 14 has been amended as follows:

In one embodiment, the invention encompasses a polypeptide comprising the amino acid sequence of SEQ ID NO:1. As shown in Figure 1, PGAMP-1 is 141 amino acids in length and has one potential casein kinase II phosphorylation site at residue S35; one potential protein kinase C phosphorylation site at residue S15; one potential tyrosine kinase phosphorylation site at residue Y110; three potential transmembrane regions between about residues I44 to P67, I81 to W102, and P117 to Q135; and has chemical similarity with CD44 antigen precursor. In addition, as shown in Figure 1, PGAMP-1 has chemical and structural similarity with rat heat-stable antigen CD4 (GI 1216498; SEQ ID NO:5). In particular, PGAMP-1 and rat heat-stable antigen CD4 share 21% identity and two potential transmembrane domains. A fragment of SEQ ID NO:[2]3 from about nucleotide 470 to about nucleotide 493 is useful, for example, for designing oligonucleotides or as a hybridization probe. Northern analysis shows the expression of this sequence in various libraries, at least 72% of which are immortalized or cancerous and at least 18% of which involve immune response. Of particular note is the expression of PGAMP in cancerous or hyperplastic prostate (48%) and breast (7%); and in brain and adrenal gland.

The paragraph beginning at line 19 of page 15 has been amended as follows:

The invention also encompasses a variant of a polynucleotide sequence encoding PGAMP. In particular, such a variant polynucleotide sequence will have at least about 80%, more preferably at least about 90%, and most preferably at least about 95% polynucleotide sequence identity to the polynucleotide sequence encoding PGAMP. A particular aspect of the invention encompasses a

variant of SEQ ID NO:[2]3 which has at least about 80%, more preferably at least about 90%, and most preferably at least about 95% polynucleotide sequence identity to SEQ ID NO:[2]3. The invention further encompasses a polynucleotide variant of SEQ ID NO:4 having at least about 80%, more preferably at least about 90%, and most preferably at least about 95% polynucleotide sequence identity to SEQ ID NO:4. Any one of the polynucleotide variants described above can encode an amino acid sequence which contains at least one functional or structural characteristic of PGAMP.

IN THE CLAIMS:

Claims 1, 11-12, 36, 39, and 44-45 have been amended as follows:

1. (Once Amended) An isolated polypeptide selected from the group consisting of:

a) a polypeptide comprising [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2,

b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2,

c) a biologically active fragment of a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, and

d) an immunogenic fragment of a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

11. (Once Amended) An isolated antibody which specifically binds to a polypeptide selected from the group consisting of:

a) a polypeptide comprising [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2,

b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to [the] an amino acid sequence [g] selected from the group consisting of SEQ

ID NO:1 and SEQ ID NO:2,

c) a biologically active fragment of a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, and

d) an immunogenic fragment of a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

12. (Once Amended) An isolated polynucleotide selected from the group consisting of:

a) a polynucleotide comprising [the] a polynucleotide sequence selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4,

b) a polynucleotide comprising a naturally occurring polynucleotide sequence at least 90% identical to [the] a polynucleotide sequence selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4,

c) a polynucleotide complementary to a polynucleotide of a),

d) a polynucleotide complementary to a polynucleotide of b), and

e) an RNA equivalent of a)-d).

36. (Once Amended) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 11, the method comprising:

a) immunizing an animal with a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, or an immunogenic fragment thereof, under conditions to elicit an antibody response,

b) isolating antibodies from said animal, and

c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

39. (Once Amended) A method of making a monoclonal antibody with the specificity of the antibody of claim 11, the method comprising:

a) immunizing an animal with a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, or an immunogenic fragment thereof, under conditions to elicit an antibody response,

b) isolating antibody producing cells from the animal,

c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells,

d) culturing the hybridoma cells, and

e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

44. (Once Amended) A method of detecting a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 in a sample, the method comprising:

a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and

b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 in the sample.

45. (Once Amended) A method of purifying a polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 from a sample, the method comprising:

a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide, and

b) separating the antibody from the sample and obtaining the purified polypeptide having [the] an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.